In re PULLELA ET AL., Application No. 10/625,063
Amendment A

**Amendments to the Claims:**

The listing of clams will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

Claim 1 (canceled)

Claim 2 (currently amended): ~~The method of claim 1, comprising~~ A method for processing packets, the method comprising:

identifying a packet;

identifying a flow identification value based on the packet;

performing a lookup based on the flow identification value to identify a flow identification value mask; and

masking the flow identification value with the flow identification value mask to generate a masked flow identification value.

Clam 3 (currently amended): The method of ~~claim 1~~ claim 2, comprising updating a data structure based on the masked flow identification value.

Claim 4 (currently amended): The method of ~~claim 1~~ claim 3, wherein the flow identification value includes at least two items of the list consisting of source address, destination address, source port, destination port, and protocol type.

Claim 5 (currently amended): The method of ~~claim 1~~ claim 3, wherein the flow identification value includes a transport layer, session layer, presentation layer or application layer value.

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Claim 6 (currently amended): The method of claim 3, wherein said performing the lookup based on the flow identification value includes performing a lookup operation in an access control list.

Claim 7 (currently amended): The method of claim 3, wherein said performing the lookup based on the flow identification value includes:

performing a first lookup operation on a first set of associative memory entries based on the flow identification value to generate an associative memory result; and

performing a second lookup operation in an adjunct memory based on the associative memory result to identify the flow identification value mask.

Claim 8 (original): The method of claim 7, wherein the first set of associative memory entries correspond to access control list entries.

Claim 9 (canceled)

Claim 10 (currently amended): ~~The apparatus of claim 9,~~ An apparatus for processing packets, the apparatus comprising:

a packet processing engine configured to identify a packet and a flow identification value based on the packet;

an associative memory configured to perform a first lookup operation based on the flow identification value to identifying a matching location;

an adjunct memory configured to perform a second lookup operation based on the matching location to identify a flow identification value mask;.

masking logic configured to mask the flow identification value with the flow identification value mask to generate a masked flow identification value; and

a value memory configured to update a value at a position corresponding to the masked flow identification value.

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Claim 11 (canceled)

Claim 12 (currently amended): ~~The computer-readable medium of claim 11, wherein said steps comprise~~ A computer-readable medium containing computer-executable instructions for performing steps for processing packets, said steps comprising:
  identifying a packet;
  identifying a flow identification value based on the packet;
  performing a lookup based on the flow identification value to identify a flow identification value mask; and
  masking the flow identification value with the flow identification value mask to generate a masked flow identification value.

Claim 13 (currently amended): The computer-readable medium of ~~claim 11~~ claim 12, wherein said steps comprise updating a data structure based on the masked flow identification value.

Claim 14 (currently amended): The computer-readable medium of ~~claim 11~~ claim 12, wherein the flow identification value includes at least two items of the list consisting of source address, destination address, source port, destination port, and protocol type.

Claim 15 (currently amended): The computer-readable medium of ~~claim 11~~ claim 12, wherein the flow identification value includes a transport layer, session layer, presentation layer or application layer value.

Claim 16 (currently amended): The computer-readable medium of ~~claim 11~~ claim 12, wherein said performing the lookup based on the flow identification value includes performing a lookup operation in an access control list.


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Claim 17 (currently amended): The computer-readable medium of ~~claim 11~~ claim 12, wherein said performing the lookup based on the flow includes:

performing a first lookup operation on a first set of associative memory entries based on the flow identification value to generate an associative memory result; and

performing a second lookup operation in an adjunct memory based on the associative memory result to identify the flow identification value mask.

Claim 18 (canceled)

Claim 19 (canceled)

Claim 20 (currently amended): ~~The apparatus of claim 19, comprising~~ An apparatus for processing packets, the method comprising:

means for identifying a packet;

means for identifying a flow identification value based on the packet;

means for performing a lookup based on the flow identification value to identify a flow identification value mask; and

means for masking the flow identification value with the flow identification value mask to generate a masked flow identification value.

Claim 21 (currently amended): The apparatus of ~~claim 19~~ claim 20, comprising means for updating a data structure based on the masked flow identification value.

Claim 22 (currently amended): The apparatus of ~~claim 19~~ claim 20, wherein the flow identification value includes at least two items of the list consisting of source address, destination address, source port, destination port, and protocol type.

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Claim 23 (currently amended): The apparatus of ~~claim 19~~ claim 20, wherein the flow identification value includes a transport layer, session layer, presentation layer or application layer value.

Claim 24 (currently amended): The apparatus of ~~claim 19~~ claim 20, wherein said means for performing the lookup based on the flow identification value includes means for performing a lookup operation in an access control list.

Claim 25 (currently amended): The apparatus of ~~claim 19~~ claim 20, wherein said means for performing the lookup based on the flow identification value includes:

means for performing a first lookup operation on a first set of associative memory entries based on the flow identification value to generate an associative memory result; and

means for performing a second lookup operation in an adjunct memory based on the associative memory result to identify the flow identification value mask.

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